DIVISION OF OCCUPATIONAL SAFETY AND HEALTH

Together With TENNESSEE OSHA

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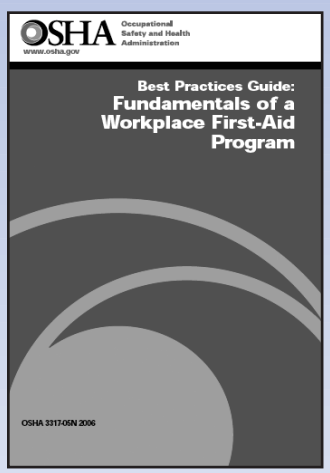
Best Practices for First-Aid Programs



OSHA has released a new guide to help employers and employees develop workplace first-aid programs. Titled "Best Practices Guide: Fundamentals of a Workplace First-Aid Program," the publication is available at www.osha.gov under "Publications."

The guide details the primary components of a first-aid program for the workplace and identifies four essential elements for first-aid programs to be effective and successful. The guide also includes best practices for planning and conducting safe and effective first-aid training. OSHA recommends that training courses include instruction in general and workplace hazard-specific knowledge and skills and incorporate automated external defibrillator (AED) training into CPR training if an AED is available at the work site. First-aid training should also be repeated periodically to help maintain and update knowledge and skills.

TOSHA standards require trained first-aid providers at all workplaces where there is no "infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees." Near proximity means a maximum of four minutes travel time. In addition several TOSHA standards require training in cardiopulmonary resuscitation (CPR). These standards include

1910.146	Permit Required Confined Spaces
1910.266	Appendix B: Logging Operations – First-Aid and CPR Training
1910.269	Electric Power Generation, Transmission, and Distribution
1910.410	Qualifications of Dive Teams
1926.950	Construction Subpart V, Power Transmission and Distribution

Training for first aid is offered by the American Heart Association, the American Red Cross, the National Safety Council, and other nationally recognized and private educational organizations. OSHA and TOSHA do not teach first-aid courses or certify first-aid training courses for instructors or trainees.

Test Yourself ☑

Topic: Fire

According to Subpart L of the TOSHA standards, Class A fires involve:

A. Flammable or combustible liquids
B. Energized electrical equipment
C. Combustible metals such as magnesium
D. Ordinary combustible materials such as paper and wood
E. All of the above

Answer: D

Heat Stress

It's hot weather again in Tennessee. That means if you or your employees are working outside, you need to be aware of the dangers of heat stress. When the body is unable to cool itself sufficiently by sweating, several heat-induced illnesses such as heat stress or heat exhaustion and the more severe heat stroke can occur, and can result in death. Factors that lead to heat stress include high temperature and humidity; direct sun or heat; limited air movement; physical exertion; poor physical condition; some medicines; and inadequate tolerance to hot workplaces.

► See Heat Stress, Page 3

All About TOSHA

Need Help? Call TOSHA's Consultative Services

Part 14

TOSHA's Consultative Services assists employers, especially smaller employers, in achieving a safe and healthful workplace for their employees. Consultative Services offers both occupational safety and industrial hygiene services to manufacturing, construction, health care, and other types of businesses in Tennessee. The industrial hygienists and occupational safety specialists on the Consultative Services staff will identify safety and health hazards in your workplace and help you implement cost-effective hazard control solutions.

Consultative Services has successfully performed more than 4,000 consultation visits in Tennessee. The service is designed for small employers (250 employees or fewer on-site or 500 nationwide) who want to identify hazards and reduce injuries and illnesses on the job. In addition to identifying hazards and recommending corrective measures, the consultants can help you develop a safety management program to keep those hazards from recurring.

Some of the services offered include the following:

- ► Comprehensive evaluations of the entire facility
- ► Partial visits to look at specific areas of concern
- ► Air contaminant and noise monitoring
- ► Construction site evaluations
- ► Improvements for your safety and health program
- ► Cost effective control measures
- ► Employer and employee training

After the on-site visit is complete, the consultant will provide the employer with a written report including a list of hazards and ways to correct them and prevent their recurrence.

The best news is, IT'S FREE. State and federal dollars fund the program. It's also confidential and there are NO MONETARY PENALTIES. Your only obligation is to correct the hazards identified by the consultant. To take advantage of the program, call Jim Cothron at 615-741-2793.

TENNESSEE OSHA

Together with TOSHA is the newsletter of the Division of Occupational Safety and Health.

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Effective Management of Safety and Health

I S S U E S

From TOSHA Consultative Services

Over the years TOSHA has noted that where effective safety and health management is practiced, injury and illness incidents are significantly less than those at comparable worksites where safety and health management is weak or non-existent.

There are many elements to effective safety and health management practices. One element is regularly performed safety and health self-inspections. A "regularly" scheduled inspection recurs at daily, weekly, monthly, quarterly, etc., intervals. The appropriate frequency of inspections depends on the stability and criticality of the factors covered by each inspection. Ideally, this responsibility is not given to a single individual, but should be spread throughout the organization. Workers should perform or participate in the performance of safety and health inspections of their own work areas or operations. Team efforts, such as those of a safety committee, are highly desirable, especially for general inspections. No inspection is effective unless each identified hazard is immediately corrected or appropriately scheduled for correction in the organization's action plan for safety and health.

Heat Stress Continued

The symptoms of heat exhaustion include headaches, dizziness, lightheadedness or fainting, weakness and moist skin, mood changes such as irritability or confusion, and upset stomach or vomiting. Symptoms of the more severe heat stroke include dry, hot skin with no sweating, mental confusion or loss of consciousness, and seizures or fits.

To prevent heat stress, do the following:

- Know the signs/symptoms of heat-related illnesses and monitor yourself and co-workers.
- Block out direct sun or other heat sources.
- Use cooling fans or air-conditioning and rest regularly.
- Drink lots of water, about 1 cup every 15 minutes.
- Wear lightweight, light colored, loose-fitting clothes.
- Avoid alcohol, caffeinated drinks, or heavy meals.

What to do for heat-related illness

Call 911 (or local emergency number) at once.

While waiting for help to arrive:

- Move the worker to a cool, shaded area.
- Loosen or remove heavy clothing.
- Provide cool drinking water.
- Fan and mist the person with water.

For a copy of this information in English and Spanish in a format you can easily distribute to employees and co-workers, visit www.osha.gov, click on the Quick Cards link of the right side of the page, and click on Heat under "Heat and Sun-Protect Yourself."

TOSHA TIPS • TOSHA TIPS • TOSHA TIPS • TOSHA TIPS

Condition: An oxygen cylinder was not stored 20 feet from a fuel-gas cylinder or combustible material or protected by an adequate barrier.

Potential Effects: Burns, smoke-related injuries and traumatic injuries, from fire and/or explosion.

Standard: 29 CFR 1910.253(b)(4)(iii)

Recommended Action: Store oxygen cylinders at least 20 ft from fuel-gases and other combustibles such as oil, grease, gasoline, paint, and dirty rags. If oxygen cylinders must be stored near combustibles, keep them behind a fire-resistant wall or barrier at least 5 ft high and having a fire resistance rating of at least one-half hour. Note that a sheet metal partition is not an acceptable barrier.

Protect all cylinders against:

Physical and mechanical damage,	Valve damages,
Tampering by an unauthorized person,	High temperature (above 51.7^{o}C or 125^{o}F).

Special rules for storing fuel-gases exist to keep leaks from becoming dangerous and to keep fires, should they occur, from spreading:

- Post "No Smoking-Oxygen" signs around the oxygen (and fuel-gas) storage area.
- Acetylene and liquefied gas cylinders shall be stored valve end up with the valve closed.
- Never store fuel-gas cylinders in a room heated by an open flame.
- Never store anything else in an indoor storage area or building containing flammable gases.
- Walls, partitions, floors, and ceilings of the storage room should have a fire-resistance rating of at least one hour, according to National Fire Protection Association (NFPA) standards. The walls or partitions should be continuous from floor to ceiling and at least one wall of the room should be an outside wall. Self-closing fire doors should be used and windows should be made of wired glass and set in metal frames with a fixed sash.
- Limits as to how much fuel gas should be stored inside a plant have been set by NFPA. Never store more than 309 lb of propane, 375 lb of butane, or 2000 cu ft of acetylene (6 cylinders of 240 lb or 300 cu ft size) in any one location. These limits are designed to keep a fire, should one occur, as small as possible. If these limits are exceeded, the gases should be stored outside or in a building or room meeting NFPA fire-resistant construction recommendations.

LEARN & LIVE

A TOSHA Case File Summary

A 26-year old worker was killed when rock and dirt in a trench collapsed. The victim and a co-worker were working near a large rock using a jackhammer to smooth the grade of the excavation in order to lay sewer pipe. A track hoe operator had tried to move the rock, but was unable to shift it.

The approximately 40-ton rock suddenly fell upon both workers, pinning the victim into the wall of the excavation and the co-worker into the bottom of the excavation. Rescue workers measured the depth of the trench where the employees were trapped at nine feet four inches.

The co-worker was rescued after almost six hours in the trench and was air lifted to a local hospital. The victim was recovered from the excavation about one hour later. No soil survey had been done by the employer to determine the classification of the soil and no shoring, sloping, or trench box was used prior to the cave-in.

To Prevent This Accident from Happening

1. Instruct each employee in the recognition and avoidance of unsafe conditions in his work environment.
2. Locate a stairway, ladder, ramp or other safe means of egress in trench excavations that are 4 feet or more in depth so as to require no more than 25 feet of lateral travel for employees.
3. Provide protection by placing and keeping excavated or other materials or equipment at least 2 feet from the edge of excavations, or by the use of restraining devices to prevent materials or equipment from falling or rolling into excavations.
4. Ensure that a competent person makes daily inspections of excavations, the adjacent areas, and protective systems.
5. Protect each employee in an excavation from cave-ins by an adequate protective system (i.e., sloping, shoring or trench box) where the excavation exceeded 5 feet in depth.

40-ton boulder falls on two workers during trench operation

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